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Chapter 1: Introduction

Getting Started

To assure the safe application of the mini PC, please carefully read the following:

- Before disassembling or cleaning this product, make sure the power connector is unplugged.
- Keep the mini PC away from excessive moisture, direct sunlight, and extreme heat and cold. Keep liquids away from the mini PC and keyboard.
- Never wipe the interior of the system with water or dip the system in water.
- Before connecting to any peripheral, please turn off the power of the system.

Package Checklist

Please carefully unpack the mini PC and check the following items from the package:

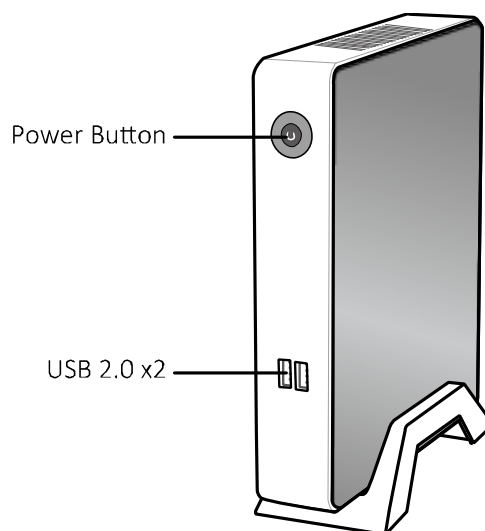
- | | |
|-----------------------------------|---------------------------------|
| ● mini PC x1 | ● Power Adaptor x1 |
| ● Stand x1 | ● Quick Start Guide x1 |
| ● SATA Cable x1 | ● DVD Driver x1 |
| ● Screws Pack x1 | ● Rubber Stands x4 |
| ● Power Cord x1 | ● Antenna x1 |
| ● VESA Mounting Kit x1 (optional) | ● Wireless Module x1 (optional) |

Specification

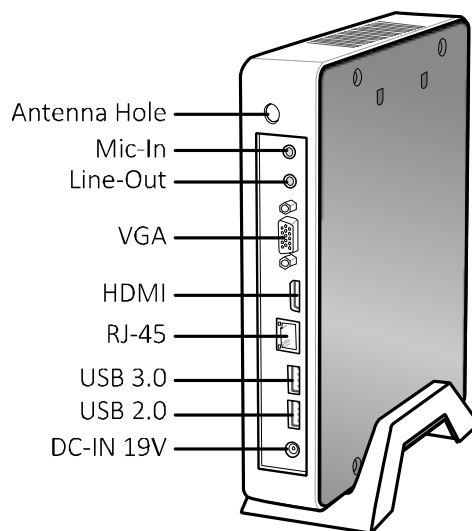
Processor	iDEQ-T1 IN2940T1: Intel® Celeron® Processor N2940 (2M Cache, up to 2.25 GHz) iDEQ-T1 IJ1800T1: Intel® Celeron® Processor J1800 (1M Cache, up to 2.58 GHz)	
Graphics	Integrated Intel® HD Graphics series graphic engine	
Memory	Supports Dual Channel DDR3L 1333 (1.35V/1.5V) 2x DDR3L SO-DIMM Memory Slot, Max. Supports up to 16 GB Memory Each DIMM supports non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L module * Please refer to www.biostar.com.tw for Memory support list.	
Networking	LAN (RTL8111G)	1x Gigabit Ethernet, RJ-45 Port
	WLAN (Wi-Fi module sold separately)	1x Mini PCIe Connector
Audio	Realtek Codec ALC662, Support 2x Port with Line out / MIC in	
Storage	1x SATA II connector, data transfer rates up to 3.0Gb/s	
Rear I/O	DC jack (19V DC-in)	1x
	USB 3.0 port	1x
	USB 2.0 port	1x
	RJ-45 Gigabit Lan port	1x
	HDMI connector	1x
	VGA connector	1x
	Line-Out	1x
	Mic-In	1x
Front I/O	USB 2.0 port	2x
	Power on button	1x
Environment	Operation Temperature	0°C ~ 40°C (32°F ~ 100°F)
	Storage Temperature	-20°C ~ 60°C (-4°F ~ 140°F)
	Relative Humidity	20% ~ 80% non-condensing
Power Supply	19V/45W	
OS Support	Windows 7 / 8 / 8.1 Biostar reserves the right to add or remove support for any OS with or without notice.	
Mounting	Foot stand	
	VESA 75/100 Mount Bracket (Optional)	
Dimension	210mm (L) x 40mm (W) x 185mm (H)	
Weight	0.8 kg	
Regulatory Compliance	CE/FCC	

Getting to Know Your System

Front Panel



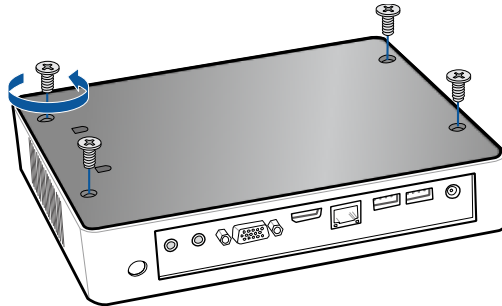
Rear Panel



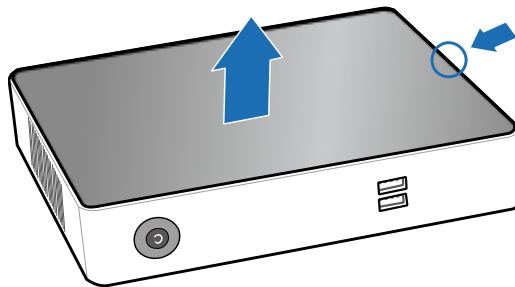
Chapter 2: System hardware installation

Disassembling the Cover

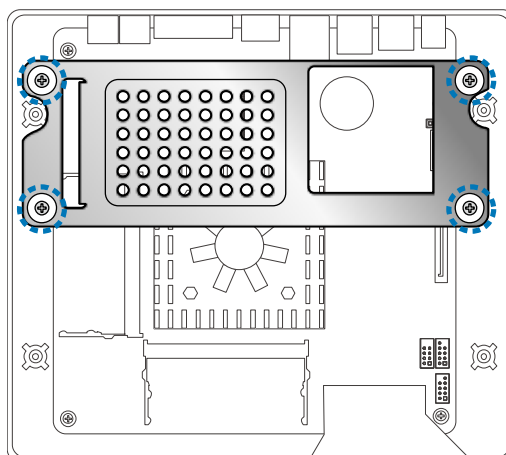
1. Loosen four screws on the bottom cover, then turn the system over.



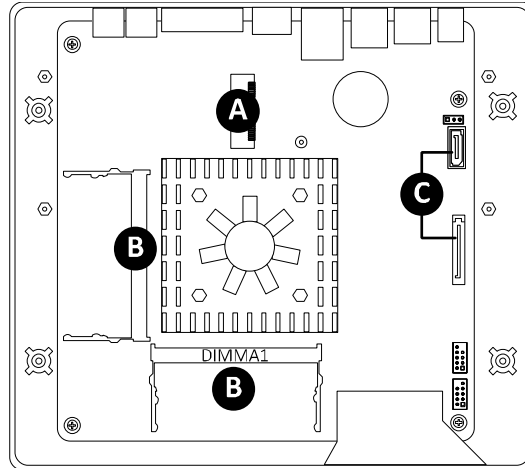
2. Place the tip of your fingernail into the tiny gap between the cover and the chassis, then pull up the cover.



3. Loosen four screws of HDD Bracket.

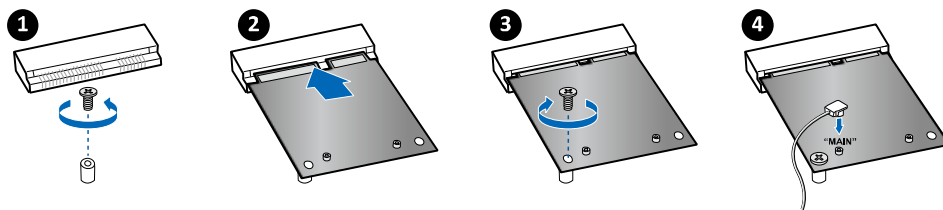


4. After removing the HDD bracket, you will see the system board.



A. Installing WiFi Module

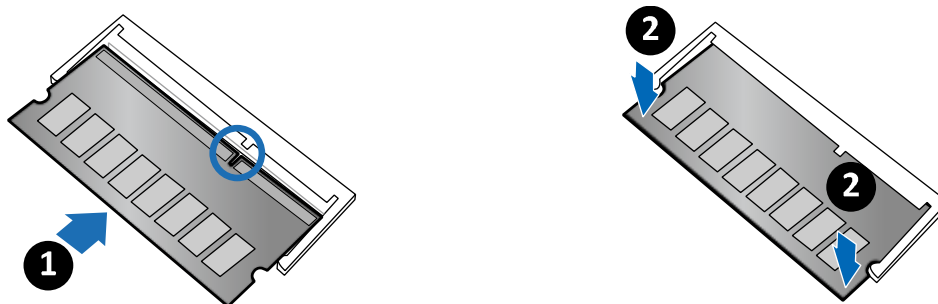
Insert WiFi module into mini PCIe slot and fasten screw. Connect antenna line to “MAIN” on the WiFi module.



Note: Wi-Fi module sold separately

B. Installing Memory Module (1.35V/1.5V)

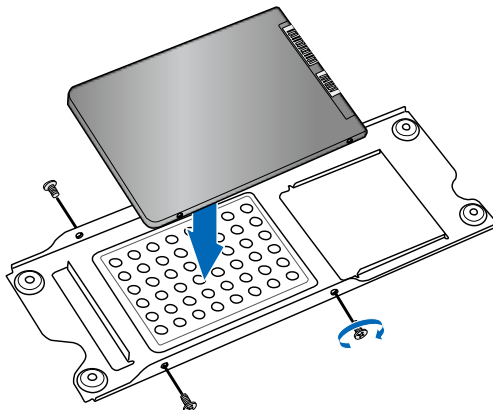
Insert memory module into SODIMM socket at backside of motherboard.



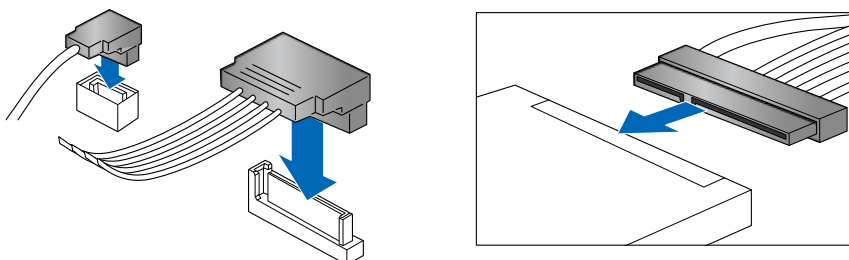
Note: The DIMM must be installed to DIMMA1 slot first.

C. Installing a 2.5 inch HDD

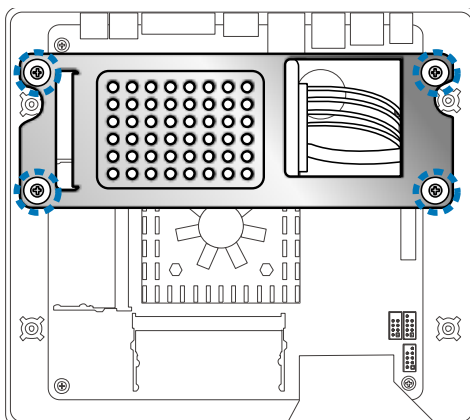
1. Fasten HDD bracket with HDD.



2. Connect the SATA cable to the HDD and system board.

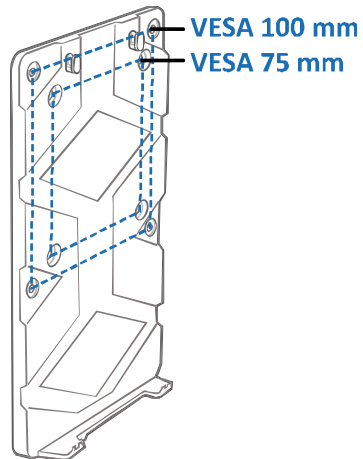


3. Screw the HDD bracket back to the system.

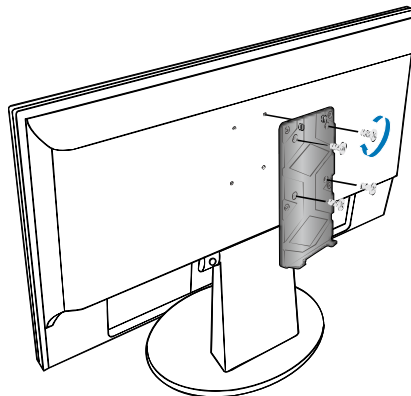


VESA Bracket (Optional)

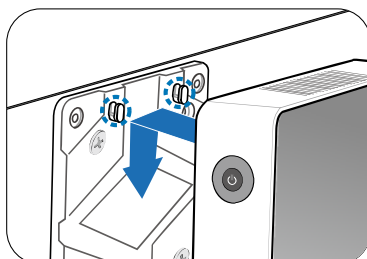
1. The mounting kit has either the VESA 75 mm or 100 mm mounting pattern.



2. Secure the VESA mounting bracket to your monitor with four screws.

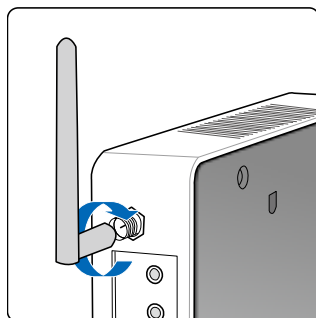


3. Place your PC on VESA bracket and make sure the PC is hooked by the VESA mounting bracket.

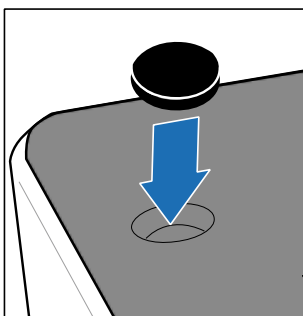


Antenna

Fasten antenna to the connector.



Note: After the system assembly, please place the rubber stand to each screw hole.



Chapter 3: BIOS Setup

Introduction

The purpose of this manual is to describe the settings in the AMI UEFI BIOS Setup program on this motherboard. The Setup program allows users to modify the basic system configuration and save these settings to NVRAM.

UEFI BIOS determines what a computer can do without accessing programs from a disk. This system controls most of the input and output devices such as keyboard, mouse, serial ports and disk drives. BIOS activates at the first stage of the booting process, loading and executing the operating system. Some additional features, such as virus and password protection or chipset fine-tuning options are also included in UEFI BIOS.

The rest of this manual will to guide you through the options and settings in UEFI BIOS Setup.

Plug and Play Support

This AMI UEFI BIOS supports the Plug and Play Version 1.0A specification.

EPA Green PC Support

This AMI UEFI BIOS supports Version 1.03 of the EPA Green PC specification.

ACPI Support

AMI ACPI UEFI BIOS support Version 1.0/2.0 of Advanced Configuration and Power interface specification (ACPI). It provides ASL code for power management and device configuration capabilities as defined in the ACPI specification, developed by Microsoft, Intel and Toshiba.

PCI Bus Support

This AMI UEFI BIOS also supports Version 2.3 of the Intel PCI (Peripheral Component Interconnect) local bus specification.

DRAM Support

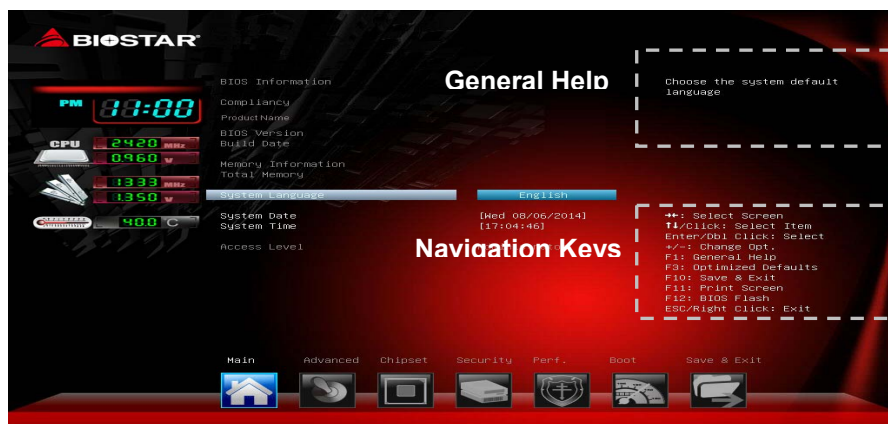
DDR3L SO-DRAM (Double Data Rate III Synchronous DRAM) is supported.

Using Setup

When starting up the computer, press during the Power-On Self-Test (POST) to enter the UEFI BIOS setup utility.

In the UEFI BIOS setup utility, you will see General Help description at the top right corner, and this is providing a brief description of the selected item.

Navigation Keys for that particular menu are at the bottom right corner, and you can use these keys to select item and change the settings.

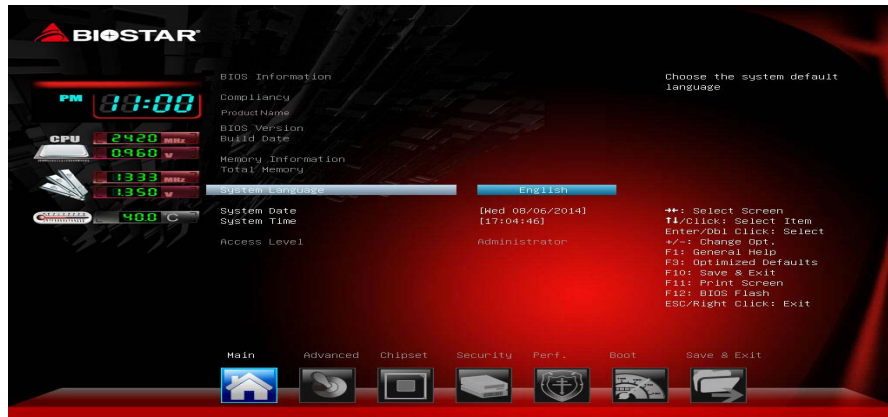


<Notice>

- The default UEFI BIOS settings apply for most conditions to ensure optimum performance of the motherboard. If the system becomes unstable after changing any settings, please load the default settings to ensure system's compatibility and stability. Use Load Setup Default under the Exit Menu.
- For better system performance, the UEFI BIOS firmware is being continuously updated. The UEFI BIOS information described in this manual is for your reference only. The actual UEFI BIOS information and settings on board may be slightly different from this manual.
- The content of this manual is subject to be changed without notice. We will not be responsible for any mistakes found in this user's manual and any system damage that may be caused by wrong-settings.

Main Menu

Once you enter AMI UEFI BIOS Setup Utility, the Main Menu will appear on the screen providing an overview of the basic system information.



BIOS Information

It shows system information including UEFI BIOS version, Product Name, Build Date and etc.

Total Memory

Shows system memory size, VGA shard memory will be excluded.

System Language

Choose the system default language.

System Date

Set the system date. Note that the 'Day' automatically changes when you set the date.

System Time

Set the system internal clock.

Advanced Menu

The Advanced Menu allows you to configure the settings of CPU, Super I/O, Power Management, and other system devices.

<Notice> Beware of that setting inappropriate values in items of this menu may cause system to malfunction.



ACPI Settings



Enable ACPI Auto Configuration

This item enables or disables BIOS ACPI Auto Configuration.

Options: Disabled (Default) / Enabled

Enable Hibernation

This item enables or disables system ability to hibernate (OS/S4 Sleep State).

This option may be not effective with some OSes.

Options: Enabled (Default) / Disabled

ACPI Sleep State

This item selects the highest ACPI sleep state the system will enter when the SUSPEND button is pressed.

Options: S3 only (Suspend to RAM) (Default) / Suspend Disabled

Lock Legacy Resources

The item enables or disables Lock of Legacy Resources.

Options: Disabled (Default) / Enabled

Restore AC Power Loss

Specify what state to go to when power is re-applied after a power failure.

Options: Power Off (Default) / Power On / Last State

EuP Control

When EuP is enabled, the system will meet EuP requirement.

Options: Disabled (Default) / Enabled

PME Wake up from S5

The item enables the system to wake from S5 using PME event.

Options: Enabled (Default) / Disabled

Wake system with Fixed Time

This item enables or disables the system to wake on by alarm event. When this item is enabled, the system will wake on the hr::min::sec specified.

Options: Disabled (Default) / Enabled

Wake up date

You can choose which date the system will boot up.

Wake up hour / Wake up minute / Wake up second

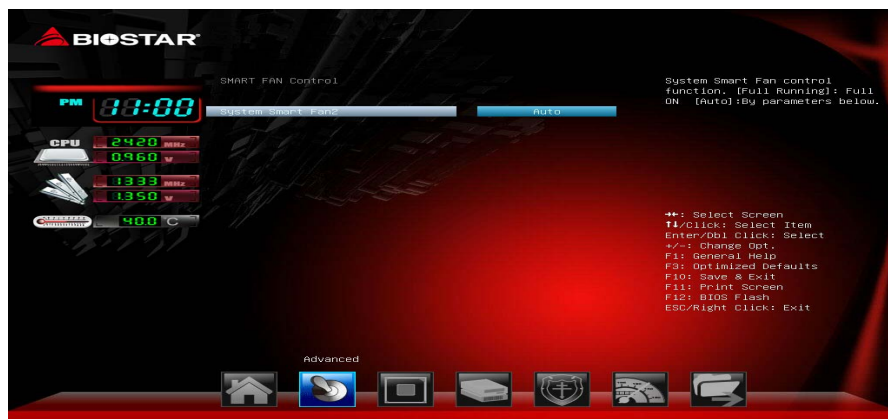
You can choose the system boot up time, input hour, minute and second to specify.

USB Device Wakeup from S3/S4

This item allows you to enable or disabled the USB resume from S3/S4 function.

Options: Disabled (Default) / Enabled

SMART FAN Control

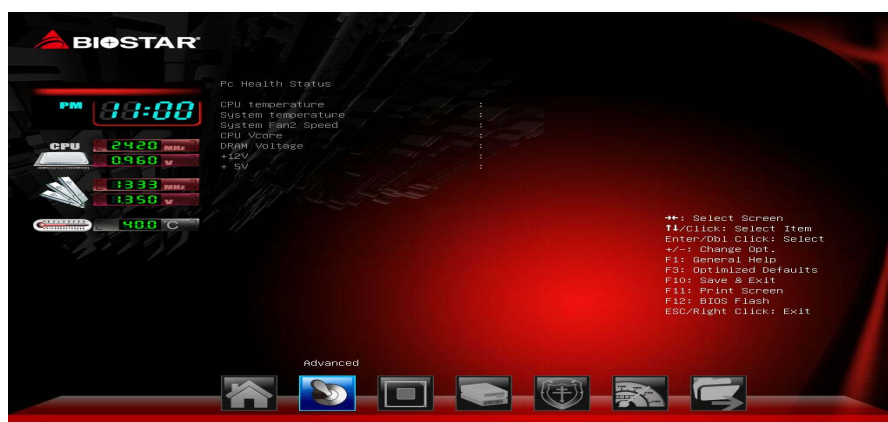


System Smart Fan2

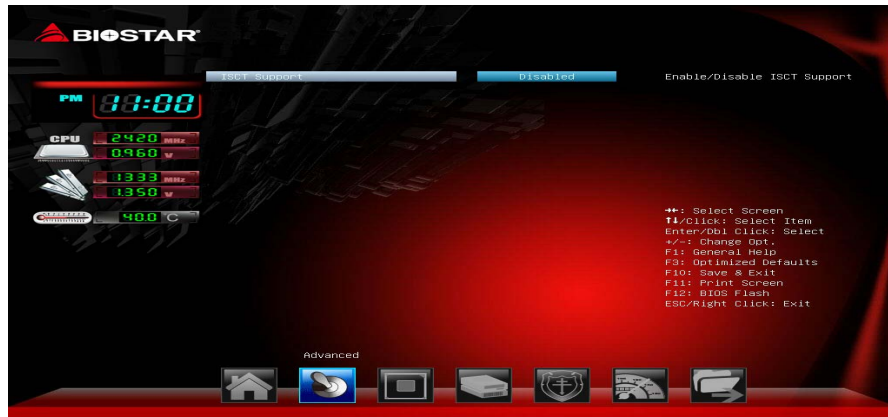
This item allows you to control the System Smart Fan function.

Options: Auto (Default) / Full Running

IT8627E H/W Monitor



Intel (R) Smart Connect Technology



ISCT Support

This item enables/disables ISCT Support.

Options: Disabled (Default) / Enabled

Note: The following items appear only when you set the ISCT Support function to [Enabled]

ISCT Notification Control

Options: Enabled (Default)

CPU Configuration

This item shows CPU Information



Active Processor Cores

This item sets number of cores to enable in each processor package.

Options: All (Default) / 1

Limit CPUID Maximum

Disabled for Windows XP

Options: Disabled (Default) / Enabled

Execute-Disable Bit

XD can prevent certain classes of malicious buffer overflow attacks when combined with a supporting OS (Windows Server 2003 SP1, Windows XP SP2, SuSE Linux 9.2, Red Hat Enterprise 3 Update 3.).

Options: Enabled (Default) / Disabled

Hardware Prefetcher

This item enables or disables the Mid Level Cache (L2) streamer Prefetcher.

Options: Enabled (Default) / Disabled

Adjacent Cache Line Prefetch

This item enables or disables the Mid Level Cache (L2) prefetching of adjacent cache lines.

Options: Enabled (Default) / Disabled

Intel Virtualization Technology

When enabled, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology

Options: Enabled (Default) / Disabled

Power Technology

This item enables or disables the power management features.

Options: Custom (Default) / Energy Efficient / Disable

EIST

This item enables or disables Intel SpeedStep.

Options: Enabled (Default) / Disabled

Turbo Mode

This item enables or disables Turbo Mode.

Options: Enabled (Default) / Disabled

P-STATE Coordination

This item changes P-STATE coordination type.

Options: HW_ALL (Default) / SW_ALL / SW_ANY

CPU C6 report

This item enables or disables CPU C6 (ACPI C3) report to OS.

Options: Enabled (Default) / Disabled

CPU C7 report

This item enables or disables CPU C7 (ACPI C3) report to OS.

Options: Enabled (Default) / Disabled

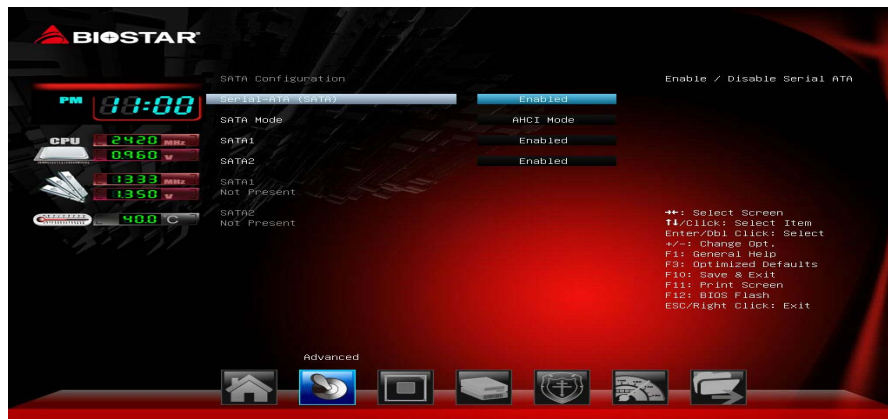
Package C State limit

This item sets Package C State limit.

Options: No Limit (Default) / C0 / C1 / C3 / C6 / C7

SATA Configuration

The BIOS will automatically detect the presence of SATA devices.



Serial-ATA (SATA)

This item enables/disables Serial ATA Device.

Options: Enabled (Default) / Disabled

SATA Mode

This item determines how SATA controller(s) operate.

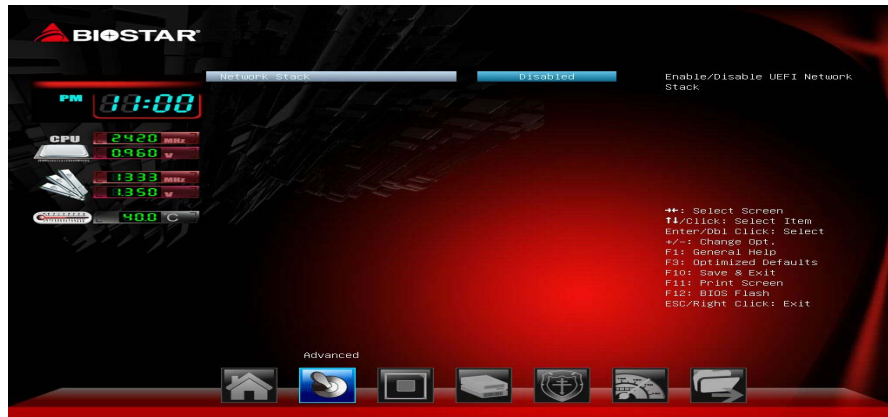
Options: AHCI Mode (Default) / IDE Mode

SATA1

This item enables/disables Serial ATA Port1.

Options: Enabled (Default) / Disabled

Network Stack Configuration



Network Stack

This item enables or disables UEFI network stack

Options: Disabled (Default) / Enabled

Note: The following items appear only when you set the Network Stack function to [Enabled]

IPv4 PXE Support

This item enables or disables IPv4 PXE Boot Support. If disabled IPv4 booth option will not be created.

Options: Enabled (Default) / Disabled

IPv6 PXE Support

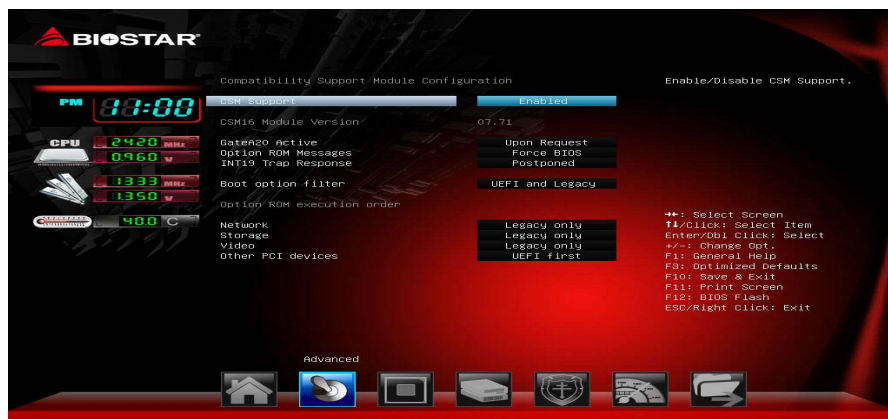
This item enables or disables IPv6 PXE Boot Support. If disabled IPv6 booth option will not be created.

Options: Enabled (Default) / Disabled

PXE boot wait time

Wait time to press ESC key to abort the PXE boot.

CSM Configuration



CSM Support

This item enables or disables CSM Support

Options: Enabled (Default) / Disabled

GateA20 Active

Upon Request – FA20 can be disabled using BIOS services. Always – do not allow disabling GA20; this option is useful when any RT code is executed above 1MB

Options: Upon Request (Default) / Always

Option ROM Messages

This item sets the display mode for option ROM.

Options: Force BIOS (Default) / Keep Current

INT19 Trap Response

BIOS reaction on INT19 trapping by Option ROM: IMMEDIATE – execute the trap right away; POSTPONED – execute the trap during legacy boot.

Options: Postponed (Default) / Immediate

Boot option filter

This option controls what devices system can boot to.

Options: UEFI and Legacy (Default) / Legacy only / UEFI only

Network

This item controls the execution of UEFI and Legacy PXE OpROM

Options: Legacy only (Default) / Do not launch / UEFI only / Legacy first / UEFI first

Storage

This item controls the execution of UEFI and Legacy Storage OpROM

Options: Legacy only (Default) / Do not launch / UEFI only / Legacy first / UEFI first

Video

This item controls the execution of UEFI and Legacy Video OpROM

Options: Legacy only (Default) / Do not launch / UEFI only / Legacy first / UEFI first

Other PCI device

It determines OpROM execution policy for devices other than Network, Storage, or video.

Options: UEFI first (Default) / Legacy only

USB Configuration



Legacy USB Support

The item allows you to enable Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.

Options: Enabled (Default) / Disabled / Auto

XHCI Hand-off

This is workaround for OSES without XHCI hand-off support. The XHCI ownership change should be claimed by XHCI driver.

Options: Enabled (Default) / Disabled

EHCI Hand-off

This is workaround for OSes without EHCI hand-off support. The EHCI ownership change should be claimed by EHCI driver.

Options: Disabled (Default) / Enabled

USB Mass Storage Driver Support

The item allows you to enable or disable USB Mass Storage Driver Support.

Options: Enabled (Default) / Disabled

USB transfer time-out

The time-out value for Control, Bulk, and Interrupt transfers.

Options: 20 sec (Default) / 1 sec / 5 sec / 10 sec

Device reset time-out

The item sets USB mass storage device Start Unit command time-out.

Options: 20 sec (Default) / 10 sec / 30 sec / 40 sec

Device power-up delay

“Auto” uses default value: for a Root port it is 100ms, for a Hub port the delay is taken from Hub descriptor.

Options: Auto (Default) / Manual

Note: The following items appear only when you set the Device power-up delay function to [Manual]

Device power-up delay in seconds

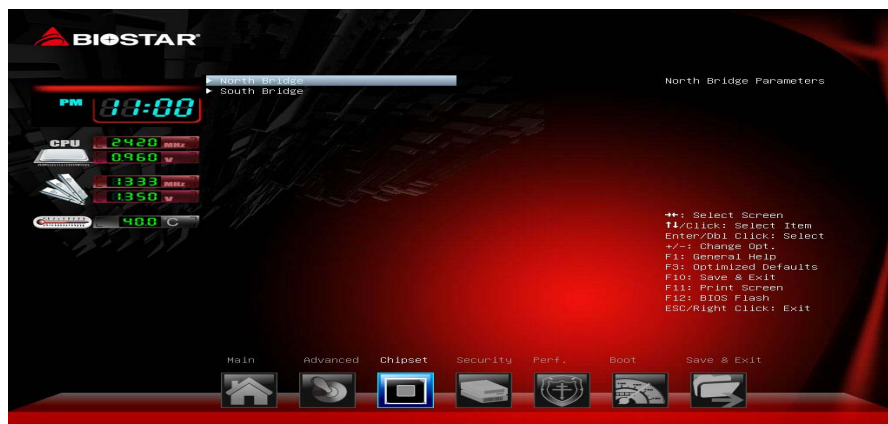
Delay range is 1 ~ 40 seconds, in one second increments.

Options: 5 (Default)

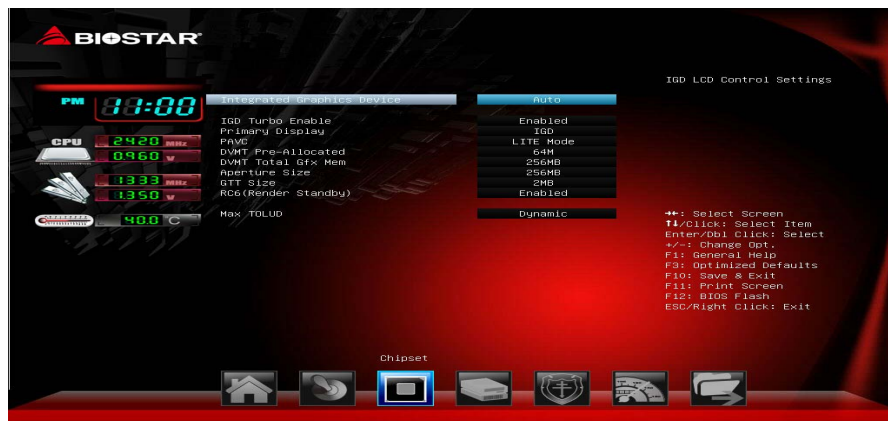
Chipset Menu

This section describes configuring the PCI bus system. PCI, or Personal Computer Interconnect, is a system which allows I/O devices to operate at speeds nearing the speed of the CPU itself uses when communicating with its own special components.

<Notice> Beware of that setting inappropriate values in items of this menu may cause system to malfunction.



North Bridge



Integrated Graphics Device

Enable: Enable Integrated Graphics Device (IGD) when selected as the Primary Video Adaptor. Disable: Always disable IGD.

Options: Auto (Default) / Disabled

IGD Turbo Enable

Enable: IGD Turbo Enable. Disable: IGD Turbo Disable.

Options: Enabled (Default) / Disabled

Primary Display

This item selects which of IGD/PCI Graphics device should be Primary Display.

Options: IGD (Default) / PCI

PAVC

This item enables/disables Protected Audio Video Control.

Options: LITE Mode (Default) / Disabled / SERPENT Mode

DVMT Pre-Allocated

This item selects DVMT 5.0 Pre-Allocated (Fixed) Graphics Memory size used by the Internal Graphics Device.

Options: 64M (Default) / 96M / 128M / 160M / 192M / 224M / 256M / 288M / 320M / 352M / 384M / 416M / 448M / 480M / 512M

DVMT Total Gfx Mem

This item selects DVMT5.0 Total Graphic Memory size used by the Internal Graphics Device.

Options: 256MB (Default) / 128MB / MAX

Aperture Size

This item selects the Aperture Size.

Options: 256MB (Default) / 128MB / 512MB

GTT Size

This item selects the GTT Size.

Options: 2MB (Default) / 1MB

RC6 (Render Standby)

This item enables or disables render standby support.

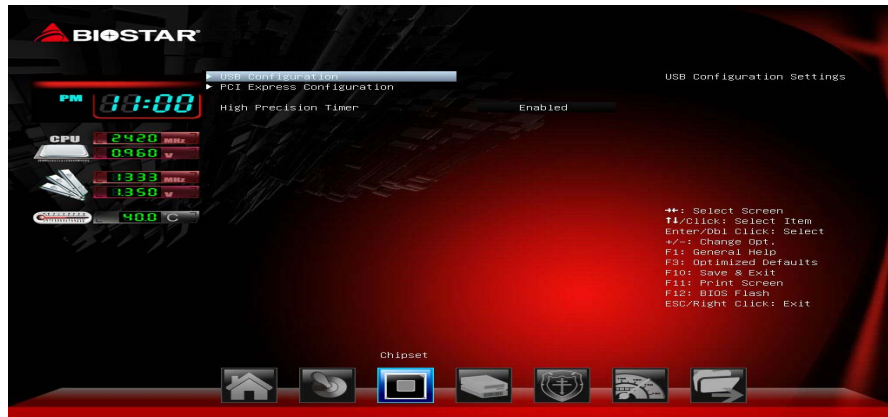
Options: Enabled (Default) / Disabled

Max TOLUD

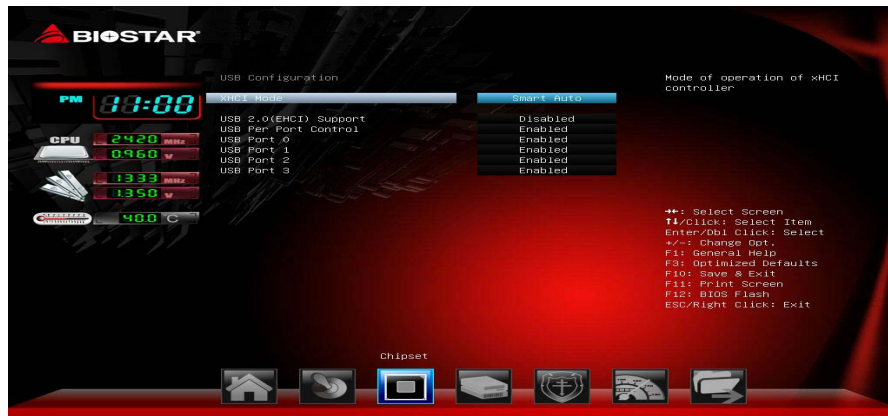
Maximum Value of TOLUD

Options: Dynamic (Default) / 1 GB / 1.25 GB / 1.5 GB / 1.75 GB / 2 GB / 2.25 GB / 2.5 GB / 2.75 GB / 3 GB

South Bridge



USB Configuration



XHCI Mode

This item enables or disables mode of operation of xHCI controller.

Options: Smart Auto (Default) / Auto / Enabled / Disabled

USB 2.0(EHCI) Support

This item controls the USB EHCI (USB2.0) functions. One EHCI controller must always be enabled.

Options: Disabled (Default) / Enabled

USB Per Port Controller

This item controls each of the USB ports(0-3). Enable: Enable USB per port;

Disable: Use USB port x setting.

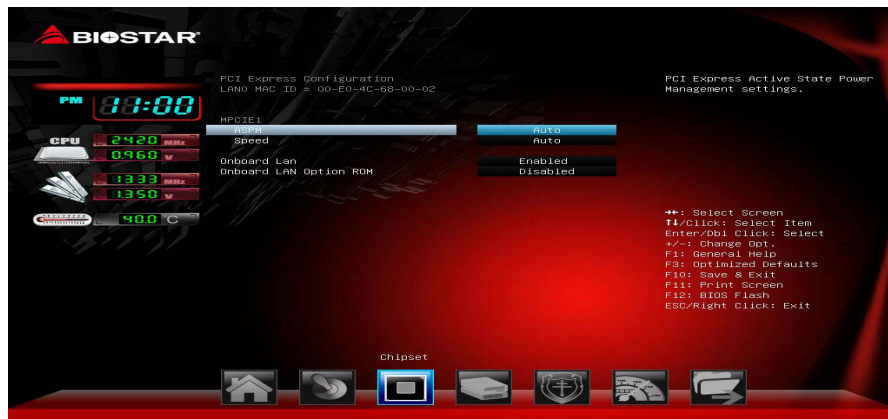
Options: Enabled (Default) / Disabled

USB Port 0/1/2/3

This item enables/disables USB port 0/1/2/3

Options: Enabled (Default) / Disabled

PCI Express Configuration



ASPM

This item sets PCI Express Active State Power Management settings.

Options: Auto (Default) / L0s / L1 / L0sL1 / Disabled

Speed

This item selects PCI Express port speed.

Options: Auto (Default) / Gen1 / Gen2

Onboard Lan

This item enables/disables the PCI Express Port 2 in the Chipset.

Options: Enabled (Default) / Disabled

Onboard LAN Option ROM

This item enables/disables Onboard LAN Option ROM.

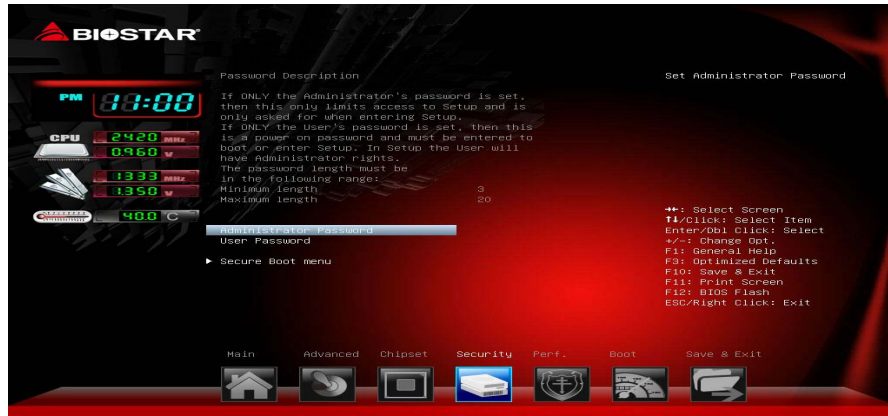
Options: Disabled (Default) / Enabled

High Precision Timer

This item enables/disables the High Precision Event Timer.

Options: Enabled (Default) / Disabled

Security Menu



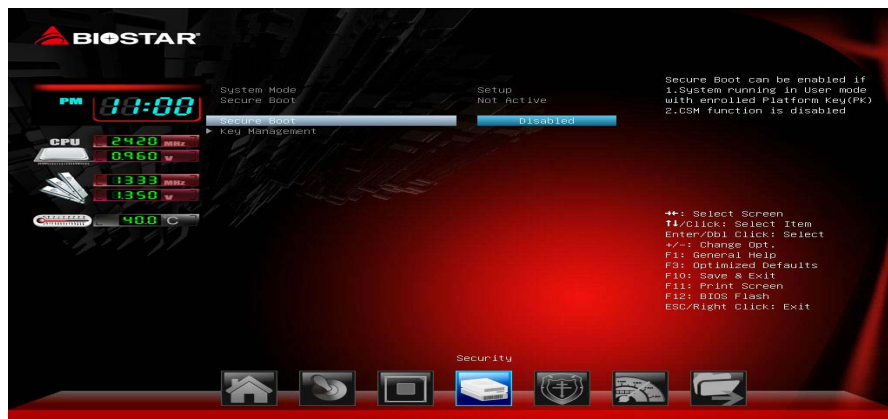
Administrator Password

This item sets Administrator Password.

User Password

This item sets User Password.

Secure Boot Menu



Secure Boot

Secure Boot flow control. Secure Boot can be enabled only when 1. Platform Key (PK) is enrolled and Platform is operating in user mode and 2. CSM function is disabled in Setup.

Options: Disabled (Default) / Enabled

Note: The following items appear only when you set the Secure Boot function to [Enabled]

Key Management



Enroll All Factory Default Keys

Forces system to user Mode – Install all Factory Default keys (PK, KEK, dbx, dbt). Change takes effect after boot.

Platform Key (PK)

Delete PK – Allows you to delete the PK file from your system.

Set new PK – Allows you set new PK file.

Key Exchange Key Database (KEK)

Delete KEK – Allows you to delete the KEK file from your system.

Set new KEK – Allows you set new KEK file.

Append Var to KEK – Allows you append Var to KEK.

Authorized Signature Database (DB)

Delete DB – Allows you to delete the DB file from your system.

Set new DB – Allows you set new DB file.

Append Var to DB – Allows you append Var to DB.

Authorized TimeStamps (DBT)

Delete DB – Allows you to delete the DBT file from your system.

Set new DB – Allows you set new DBT file.

Append Var to DB – Allows you append Var to DBT.

Forbidden Signature Database (DBX)

Delete DBX – Allows you to delete the DBX file from your system.

Set new DBX – Allows you set new DBK file.

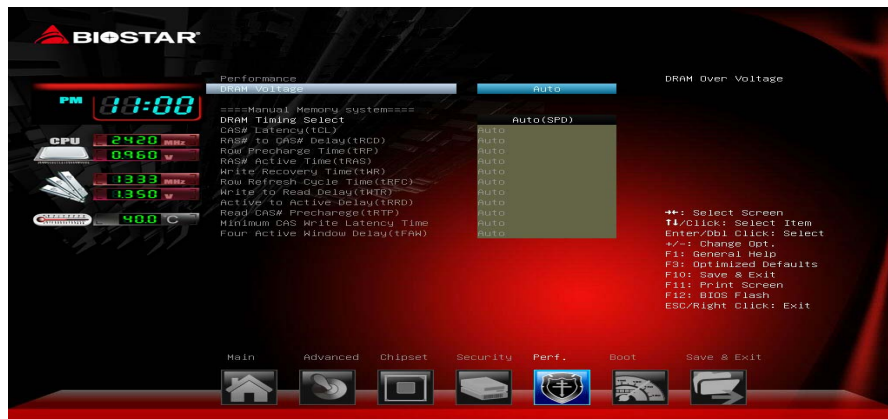
Append Var to DBX – Allows you append Var to DBX.

Performance Menu

This submenu allows you to change voltage and clock of various devices.
(However, we suggest you use the default setting. Changing the voltage and clock improperly may damage the device.)

Notice

- Beware of that setting inappropriate values in items of this menu may cause system to malfunction.
- The options and default settings might be different by RAM or CPU models.



DRAM Voltage

This item sets DRAM Voltage.

Options: Auto (Default) / 1.35V / 1.40V / 1.45V / 1.50V

DRAM Timing Select

This item sets DRAM Timing Select.

Options: Auto (SPD) (Default) / Manual

Note: The following items appear only when you set the DRAM Timing Select function to [Manual]

CAS# Latency (tCL)

This item allows you to select CAS Latency, Range 4-24

Options: Auto (Default)

RAS# to CAS# Delay (tRCD)

This item allows you to select Row Address to Column Address Delay, Range 3-20

Options: Auto (Default)

Row Precharge Time (tRP)

This item allows you to select Row Precharge Time, Range 3-15

Options: Auto (Default)

RAS# Active Time (tRAS)

This item allows you to select Row Active Time, Range 9-63

Options: Auto (Default)

Write Recovery Time (tWR)

This item allows you to select Internal Write to Read Command Delay, Range 5-16

Options: Auto (Default)

Row Refresh Cycle Time (tRFC)

This item allows you to select Minimum Refresh Recovery Time, Range 1-511

Options: Auto (Default)

Write to Read Delay (tWTR)

This item allows you to select Internal Write to Read Command Delay, Range 3-31

Options: Auto (Default)

Active to Active Delay (tRRD)

This item allows you to select Row Active to Row Active Delay, Range 4-15

Options: Auto (Default)

Read CAS# Precharge (tRTP)

This item allows you to select Read to Precharge Delay, Range 4-15

Options: Auto (Default)

Minimum CAS Write Latency Time

This item allows you to select Minimum CAS Write Latency Range, Range 5-12

Options: Auto (Default)

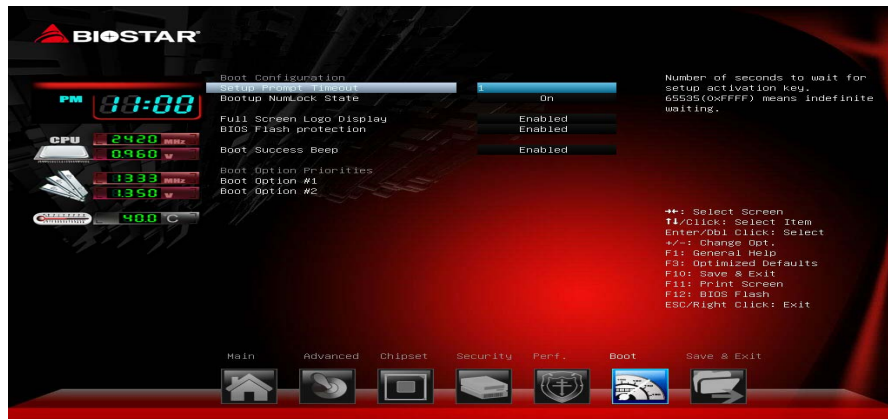
Four Active Window Delay (tFAW)

This item allows you to select Four Active Window Delay, Range 10-63

Options: Auto (Default)

Boot Menu

This menu allows you to setup the system boot options.



Setup Prompt Timeout

This item sets number of seconds to wait for setup activation key.

Options: 1 (Default)

Bootup NumLock State

This item selects the keyboard NumLock state.

Options: On (Default) / Off

Full Screen Logo Display

This item allows you to enable/disable Full Screen Logo Show function.

Options: Enabled (Default) / Disabled

BIOS Flash protection

While enabled, it can't flash write and flash erase by SMI.

Options: Enabled (Default) / Disabled

Boot Success Beep

When this item is set to Enabled, BIOS will let user know boot success with beep.

Options: Enabled (Default) / Disabled

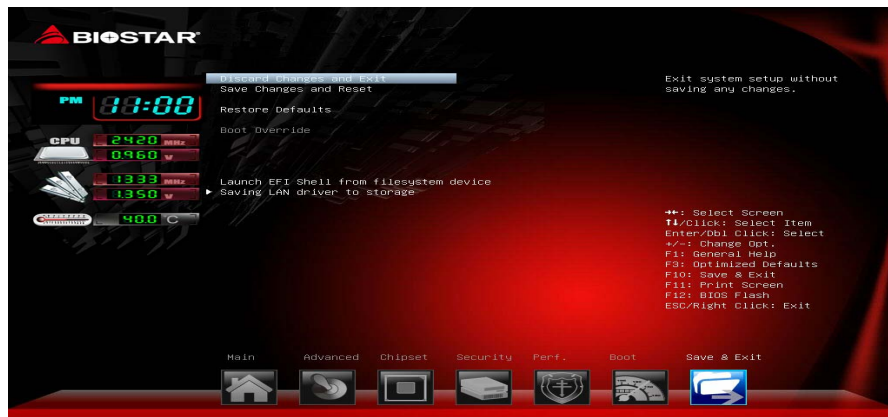
Boot Option Priorities

The items specify the boot device priority sequence from the available devices.

The number of device items that appears on the screen depends on the number of devices installed in the system.

Exit Menu

This menu allows you to load the optimal default settings, and save or discard the changes to the BIOS items.



Discard Changes and Exit

Abandon all changes made during the current session and exit setup.

Save Changes and Reset

Reset the system after saving the changes.

Restore Defaults

This selection allows you to reload the BIOS when problem occurs during system booting sequence. These configurations are factory settings optimized for this system.

Launch EFI Shell from filesystem device

This item attempts to EFI Shell application (Shellx64.efi) from one of the available filesystem devices.

Saving LAN driver to storage

Saving LAN driver to storage (WIN7_X86.EXE, WIN7_X64.EXE. Saving format support FAT16/FAT32).

Chapter 4: BIOS Update & Software

BIOS Update

The BIOS can be updated using either of the following utilities:

- **BIOSTAR BIOS Flasher:** Using this utility, the BIOS can be updated from a file on a hard disk, a USB drive (a flash drive or a USB hard drive), or a CD-ROM.
- **BIOSTAR BIOS Update Utility:** It enables automated updating while in the Windows environment. Using this utility, the BIOS can be updated from a file on a hard disk, a USB drive (a flash drive or a USB hard drive), or a CD-ROM, or from the file location on the Web.

BIOSTAR BIOS Flasher

BIOSTAR BIOS Flasher is a BIOS flashing utility providing you an easy and simple way to update your BIOS via USB pen drive.

Note1: This utility only allows storage device with FAT32/16 format and single partition.

Note2: Shutting down or resetting the system while updating the BIOS will lead to system boot failure.

Updating BIOS with BIOSTAR BIOS Flasher

1. Go to the website to download the latest BIOS file for the motherboard.
2. Then, copy and save the BIOS file into a USB flash (pen) drive.
3. Insert the USB pen drive that contains the BIOS file to the USB port.
4. Power on or reset the computer and then press <F12> during the POST process.

5. After entering the POST screen, the BIOS-FLASHER utility pops out. Choose [fs0] to search for the BIOS file.



6. Select the proper BIOS file, and a message asking if you are sure to flash the BIOS file. Click Yes to start updating BIOS.



7. A dialog pops out after BIOS flash is completed, asking you to restart the system. Press the [Y] key to restart system.



8. While the system boots up and the full screen logo shows up, press key to enter BIOS setup.
After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, the BIOS Update is completed.

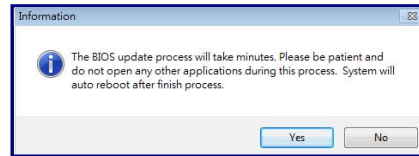
BIOS Update Utility (through the Internet)

1. Installing BIOS Update Utility from the DVD Driver.
2. Please make sure the system is connected to the internet before using this function.

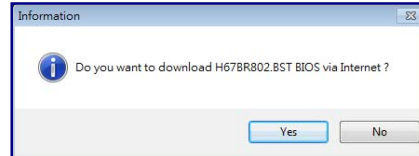
3. Launch BIOS Update Utility and click the **Online Update** button on the main screen.



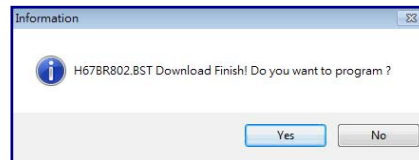
4. An open dialog will show up to request your agreement to start the BIOS update. Click **Yes** to start the online update procedure.



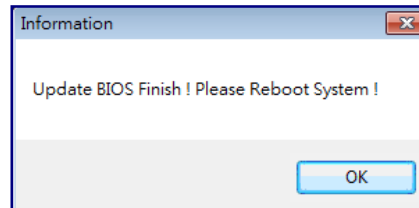
5. If there is a new BIOS version, the utility will ask you to download it. Click **Yes** to proceed.



6. After the download is completed, you will be asked to program (update) the BIOS or not. Click **Yes** to proceed.



7. After the updating process is finished, you will be asked you to reboot the system. Click **OK** to reboot.

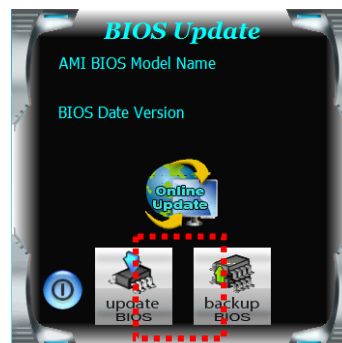


8. While the system boots up and the full screen logo shows up, press key to enter BIOS setup.
After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, the BIOS Update is completed.

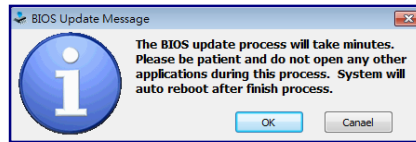
BIOS Update Utility (through a BIOS file)

1. Installing BIOS Update Utility from the DVD Driver.
2. Download the proper BIOS from <http://www.biostar.com.tw/>

3. Launch BIOS Update Utility and click the **Update BIOS** button on the main screen.



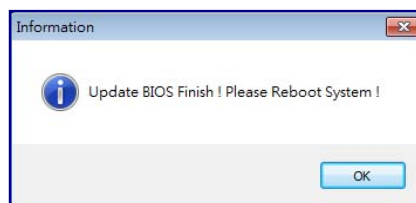
4. A warning message will show up to request your agreement to start the BIOS update. Click **OK** to start the update procedure.



5. Choose the location for your BIOS file in the system. Please select the proper BIOS file, and then click on **Open**. It will take several minutes, please be patient.



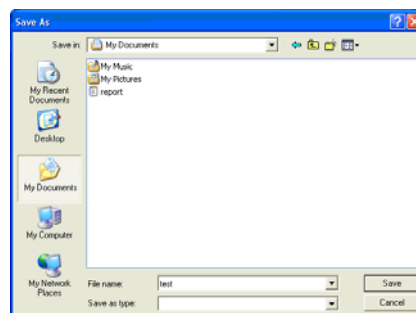
6. After the BIOS Update process is finished, click on **OK** to reboot the system.



7. While the system boots up and the full screen logo shows up, press key to enter BIOS setup. After entering the BIOS setup, please go to the **Save & Exit**, using the **Restore Defaults** function to load Optimized Defaults, and select **Save Changes and Reset** to restart the computer. Then, the BIOS Update is completed.

Backup BIOS

Click the Backup BIOS button on the main screen for the backup of BIOS, and select a proper location for your backup BIOS file in the system, and click **Save**.



Software

Installing Software

1. Insert the Setup DVD to the optical drive. The driver installation program would appear if the Auto-run function has been enabled.
2. Select **Software Installation**, and then click on the respective software title.
3. Follow the on-screen instructions to complete the installation.

Launching Software

After the installation process is completed, you will see the software icon showing on the desktop. Double-click the icon to launch it.

Note1: All the information and content about following software are subject to be changed without notice. For better performance, the software is being continuously updated.

Note2: The information and pictures described below are for your reference only. The actual information and settings on board may be slightly different from this manual.

BIOScreen Utility

This utility allows you to personalize your boot logo easily. You can choose BMP as your boot logo so as to customize your computer.



Please follow the step-by-step instructions below to update boot logo:

- Load Image : Choose the picture as the boot logo.
- Transform : Transform the picture for BIOS and preview the result.
- Update Bios : Write the picture to BIOS Memory to complete the update.

eHot-Line

eHot-Line is a convenient utility that helps you to contact with our Tech-Support system. This utility will collect the system information which is useful for analyzing the problem you may have encountered, and then send these information to our tech-support department to help you fix the problem.

Note: Before you use this utility, please set Outlook Express as your default e-mail client application program.

* represents important information that you must provide. Without this information, you may not be able to send out the mail.

This block will show the information which would be collected in the mail.

* Describe condition of your system.

The screenshot shows the eHot-Line utility window. It has a title bar 'eHot-Line' and a 'Symptom Description :' label. The main area is divided into two panes. The left pane shows system information: Base board information: Caption : Base Board, CreationClassName : Win32_Base, Description : Base Board, HostingBoard : TRUE, HotSwappable : FALSE, Manufacturer : BIOSTAR Group, Name : Base Board, PoweredOn : TRUE, Product : TA780G M2+, Removable : FALSE, Replaceable : TRUE, RequiresDaughterBoard : FALSE, SerialNumber : None, Status : OK, Tag : Base Board, Version : 6.0. The right pane is for 'Symptom Description :'. Below the panes are input fields for 'Region :', 'CC E-mail :', 'Memory Module Manufacture :', and 'Power Supply Manufacture/model :'. At the bottom are buttons for 'Send', 'Save As...', and 'Exit'. Annotations with red lines point to various parts: a red star points to the system information list; a red line points to the 'Symptom Description' text area; a red star points to the 'Region' field; a red line points to the 'CC E-mail' field; a red star points to the 'Memory Module Manufacture' field; a red line points to the 'Power Supply Manufacture/model' field; a red line points to the 'Send' button; a red line points to the 'Save As...' button; and a red line points to the 'Exit' button.

Select your area or the area close to you.

Provide the e-mail address that you would like to send the copy to.

* Provide the name of the memory module manufacturer.

Provide the name of the power supply manufacturer and the model no.

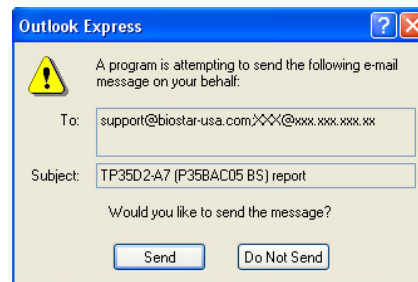
Send the mail out.

Exit this dialog.

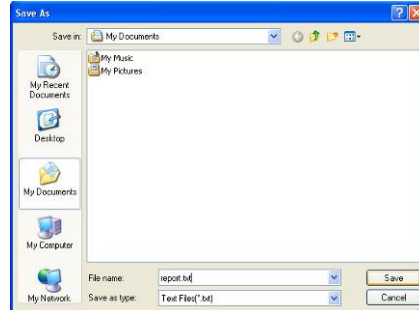
Save these information to a .txt file

After filling up this information, click **“Send”** to send the mail out. A warning dialog would appear asking for your confirmation; click **“Send”** to confirm or **“Do Not Send”** to cancel.

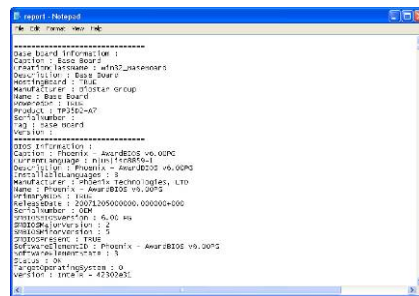
If you want to save this information to a .txt file, click **“Save As...”** and then you will see a saving dialog appears asking you to enter file name.



Enter the file name and then click “**Save**”. Your system information will be saved to a .txt file.



Open the saved .txt file, you will see your system information including motherboard/BIOS/CPU/video/ device/OS information. This information is also concluded in the sent mail.



Note1: We will not share customer's data with any other third parties, so please feel free to provide your system information while using eHot-Line service.

Note2: If you are not using Outlook Express as your default e-mail client application, you may need to save the system information to a .txt file and send the file to our tech support with other e-mail application. Go to the following website <http://www.biostar.com.tw/app/en/about/contact.php> for getting our contact information.

Smart Connect Technology

Intel® Smart Connect Technology is designed to update programs by periodically waking your computer from sleep/standby mode for a short time. This function works with applications that automatically get their data from the Internet.

System Requirement:

- Intel Smart Connect Technology enabled in BIOS Setup
- Set the “ACPI Sleep State” to S3 in BIOS Setup.
- Windows 7, Windows 8 and Windows 8.1
- Normal internet connection

Configuring Intel Smart Connect Technology

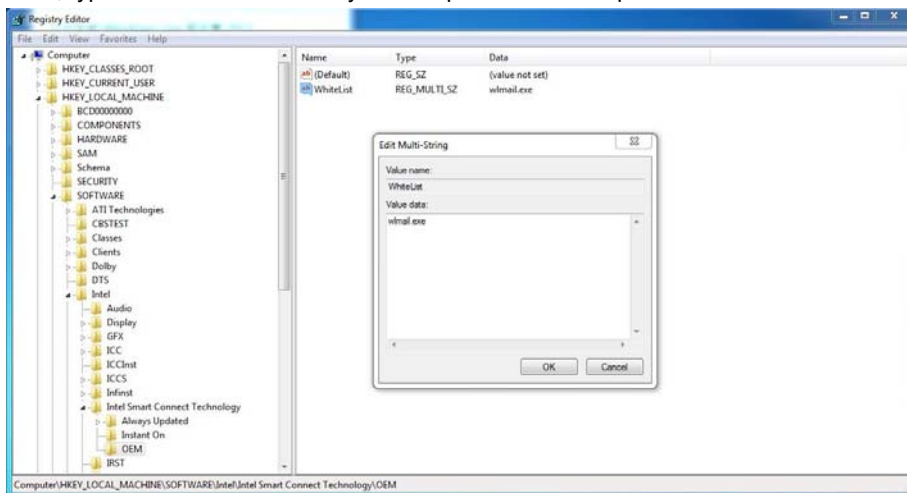
Step 1: After installing the operating system and motherboard drivers, install the Intel Smart Connect Technology application. Restart your computer when completed.

Step 2: Click on start menu and input "regedit" in the search bar. Press enter to open the registry editor. Look for the following directory in the registry editor:
Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Intel\Intel Smart Connect Technology

Right-click on Intel Smart Connect Technology and select New > Key. Type “OEM”.

Note: Intel Smart Connect Technology is for S3 mode only. During the updating process, the monitor will not light up and no sound will be output from the speaker.

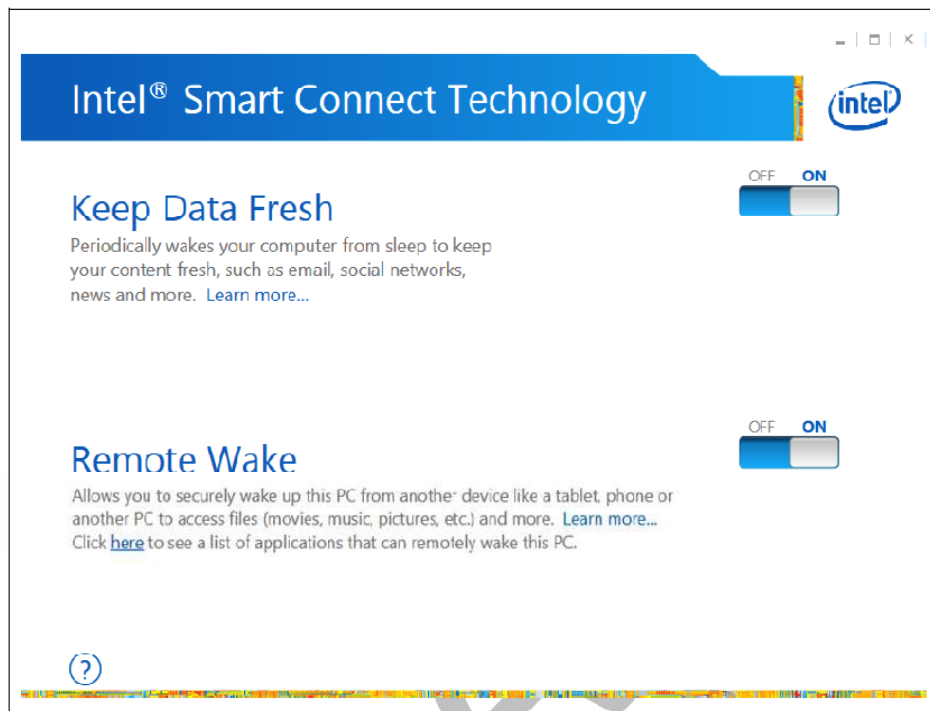
Step 3: As shown in the screenshot below, right-click on OEM, select New > Multi-String Value, and type “WhiteList”. Double-click WhiteList and type the application name to be added in Edit Multi-String. For example, to add Microsoft Live Mail, type “wlmail.exe”. Restart your computer when completed.



Step 4: After completing the steps above, go to Start\All Programs\Intel and launch Intel(R) Smart Connect Technology.

Configuration Utility

The Intel Smart Connect Technology Configuration Utility allows configuration of the sleep duration, extended hours sleep duration, and viewing of the Event History along with other settings. To launch the application, select the application “Intel® Smart Connect Technology” in the Start menu (Windows* 7) or Start screen (Windows* 8/8.1) to launch the configuration GUI. Once launched, the following is presented:



Note: For detailed setting of Intel® Smart Connect Technology, please check the below link.
<http://www.intel.com/support/services/smartconnect/sb/CS-033109.htm>

Chapter 5: Useful Help

Driver Installation

After you installed your operating system, please insert the Fully Setup Driver DVD into your optical drive and install the driver for better system performance. You will see the following window after you insert the DVD



The setup guide will auto detect your motherboard and operating system.

A. Driver Installation

To install the driver, please click on the Driver icon. The setup guide will list the compatible driver for your motherboard and operating system. Click on each device driver to launch the installation program.

B. Software Installation

To install the software, please click on the Software icon. The setup guide will list the software available for your system, click on each software title to launch the installation program.

C. Manual

Aside from the paperback manual, we also provide manual in the Driver DVD. Click on the Manual icon to browse for available manuals.

Note1: If this window didn't show up after you insert the Driver DVD, please use file browser to locate and execute the file SETUP.EXE under your optical drive.

Note2: You will need Acrobat Reader to open the manual file. Please download the latest version of Acrobat Reader software from <http://get.adobe.com/reader/>

Note3: Intel(R) Trusted Execution Engine Interface Driver is only supported with Windows 8/8.1 & Windows 7. For Windows 7 user, please install Microsoft Kernel-Mode Driver Framework (KMDF) version 1.1. Otherwise, you found a yellow bang appears as "Intel Trusted Execution Engine Interface" under system device manager. Also, you can follow the Microsoft instructions from the link: KB2685811. <http://support.microsoft.com/kb/2685811>

Troubleshooting

Probable	Solution
<ol style="list-style-type: none"> 1. There is no power in the system. Power LED does not shine; the fan of the power supply does not work 2. Indicator light on keyboard does not shine. 	<ol style="list-style-type: none"> 1. Make sure power cable is securely plugged in. 2. Replace cable. 3. Contact technical support.
System is inoperative. Keyboard lights are on, power indicator lights are lit, and hard drives are running.	Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.
System does not boot from a hard disk drive, but can be booted from optical drive.	<ol style="list-style-type: none"> 1. Check cable running from disk to disk controller board. Make sure both ends are securely plugged in; check the drive type in the standard CMOS setup. 2. Backing up the hard drive is extremely important. All hard disks are capable of breaking down at any time.
System only boots from an optical drive. Hard disks can be read, applications can be used, but system fails to boot from a hard disk.	<ol style="list-style-type: none"> 1. Back up data and applications files. 2. Reformat the hard drive. Re-install applications and data using backup disks.
Screen message shows "Invalid Configuration" or "CMOS Failure."	Review system's equipment. Make sure correct information is in setup.
System cannot boot after user installs a second hard drive.	<ol style="list-style-type: none"> 1. Set master/slave jumpers correctly. 2. Run SETUP program and select correct drive types. Call the drive manufacturers for compatibility with other drives.

Appendix: Specification In Other Languages

Arabic

iDEQ-T1 IN2940T1: Intel® Celeron® Processor N2940 (2M Cache, up to 2.25 GHz) iDEQ-T1 IJ1800T1: Intel® Celeron® Processor J1800 (1M Cache, up to 2.58 GHz)		المعالج
مشغل سلسلة جرافيكس Intel® عالية الدقة المتكاملة		الجرافيكس
يدعم القناة المزدوجة 1333 DDR3L (1.35 فولت/ 1.5 فولت) فتحة ذاكر 2x DDR3L SO-DIMM، ذاكر تدعم ما يصل إلى 16 جيجا بايت كحد أقصى كل DIMM تدعم 512 non-ECC ميجابايت/ 1 / 2 / 4 / 8 جيجا بايت وحدة DDR3L * يرجى الرجوع إلى www.biostar.com.tw لقائمة دعم الذاكرة.		الذاكرة
LAN (RTL8111G)	جيجا بايت إيثرنت، منفذ RJ-45 1x	الشبكات
WLAN (وحدة واي فاي تباع بشكل منفصل)	موصل PCIe مصغر 1x	
Realtekترميز ALC662، يدعم منفذ 2x مع مخرط خط/ مدخل ميكروفون		الصوت
موصل SATA II 1x، معدلات نقل بيانات تصل إلى 3.0 جيجابايت/ ثانية		التخزين
منفذ تيار مستمر (مدخل تيار مستمر 19 فولت)	1x	I/O الخلفي
منفذ USB 3.0	1x	
منفذ USB 2.0	1x	
منفذ LanRJ-45جيجابايت	1x	
موصل HDMI	1x	
موصل VGA	1x	
مخرج الخط	1x	
مدخل ميكروفون	1x	
منفذ USB 2.0	2x	I/O الأمامي
زر تشغيل الطاقة	1x	
درجة حرارة التشغيل	0 درجة مئوية ~ 40 درجة مئوية (32 درجة فهرنهايت ~ 100 درجة فهرنهايت)	البيئة
درجة حرارة التخزين	20- درجة مئوية ~ 60 درجة مئوية (-4 درجة فهرنهايت ~ 140 درجة فهرنهايت)	
الرطوبة النسبية	20% ~ 80% دون تكاثف	
19 فولت/ 45 وات		مزود الطاقة
ويندوز 7 / 8 / 8.1 تحتفظ شركة بيوستار "Biostar" بالحق في إضافة أو إزالة الدعم عن أي نظام تشغيل مع أو بدون سابق إنذار.		دعم نظام التشغيل
حامل الأقدام		التركيب
حامل تركيب VESA 75/100 (اختياري)		
210 مم (طول) × 40 مم (عرض) × 185 مم (ارتفاع)		الأبعاد
0.8 كجم		الوزن
CE/FCC		التوافق التنظيمي

French

Processeur	iDEQ-T1 IN2940T1: Intel® Celeron® Processor N2940 (2M Cache, up to 2.25 GHz) iDEQ-T1 IJ1800T1: Intel® Celeron® Processor J1800 (1M Cache, up to 2.58 GHz)	
Graphique	Intégré Intel® HD Série Graphique Moteur Graphique	
Mémoire	Soutient Canal double DDR3L 1333 (1.35V/1.5V) 2x DDR3L SO-DIMM Créneau de Mémoire, Max. Supporte jusqu'à 16 GB de Mémoire Chaque DIMM supporte non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L Module * Référez-vous s'il vous plaît à www.biostar.com.tw pour la liste de soutien de mémoire.	
Circuit	LAN (RTL8111G)	1x Gigabit Ethernet, RJ-45 Port
	WLAN (Wi-Fi module vendu séparément)	1x Mini PCIe Connecteur
Audio	Realtek Codec ALC662, Soutient 2x Port avec Line-sortie / MIC-entrée	
Stockage	1x SATA II connecteur, taux de transfert de données jusqu'à 3.0Gb/s	
Arrière I/O	DC Jack (19V DC-in)	1x
	USB 3.0 Port	1x
	USB 2.0 Port	1x
	RJ-45 Gigabit Lan Port	1x
	HDMI Connecteur	1x
	VGA Connecteur	1x
	Line-sortie	1x
	Mic-entrée	1x
Avant I/O	USB 2.0 Port	2x
	Bouton de Puissance	1x
Milieu	Température de Fonctionnement	0°C ~ 40°C (32°F ~ 100°F)
	Température de Stockage	-20°C ~ 60°C (-4°F ~ 140°F)
	Humidité Relative	20% ~ 80% Sans Condensation
Alimentation Électrique	19V/45W	
OS Soutien	Windows 7 / 8 / 8.1 Biostar se réserve le droit de ajouter ou de supprimer du support OS avec ou sans notification.	
Fixation	Support de Pie	
	VESA 75/100 Support de Fixation (Optional)	
Dimensions	210mm (Longeur) x 40mm (Largeur) x 185mm (H)	
Poids	0.8 kg	
Conformité à la réglementation	CE/FCC	

German

Prozessor	iDEQ-T1 IN2940T1: Intel® Celeron® Processor N2940 (2M Cache, up to 2.25 GHz) iDEQ-T1 IJ1800T1: Intel® Celeron® Processor J1800 (1M Cache, up to 2.58 GHz)	
Grafik	Integrierter Intel® HD Grafik Serie grafischer Motor	
Speicher	Unterstützt Doppelkanal DDR3L 1333 (1.35V/1.5V) 2x DDR3L SO-DIMM Speicher Schlitz, Max. Unterstützt bis 16 GB Speicher Jeder DIMM unterstützt non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L Modul * Bitte konsultieren Sie www.biostar.com.tw für die Unterstützungsliste des Speichers.	
Netzwerk	LAN (RTL8111G)	1x Gigabit Ethernet, RJ-45 Anschluss
	WLAN (Wi-Fi Modul wird separat verkauft)	1x Mini PCIe Steckverbinder
Audio	Realtek Codec ALC662, Unterstützung 2x Anschluss mit Line out / MIC in	
Lager	1x SATA II Steckverbinder, Daten Übertragungsrate bis zu 3.0Gb/s	
Rückseite I/O	DC Klinkenstecker (19V DC-in)	1x
	USB 3.0 Anschluss	1x
	USB 2.0 Anschluss	1x
	RJ-45 Gigabit Lan Anschluss	1x
	HDMI Steckverbinder	1x
	VGA Steckverbinder	1x
	Line-Out	1x
	Mic-In	1x
Forderseite I/O	USB 2.0 Anschluss	2x
	Leistung auf Taste	1x
Umgebung	Betriebstemperatur	0°C ~ 40°C (32°F ~ 100°F)
	Lagertemperatur	-20°C ~ 60°C (-4°F ~ 140°F)
	Relative Luftfeuchtigkeit	20% ~ 80% nicht kondensierend
Netzteil	19V/45W	
OS Unterstützung	Windows 7 / 8 / 8.1 Biostar behält sich das Recht vor Unterstützung hin zu fügen oder zu entfernen für jede OS mit oder ohne Ankündigung.	
Befestigung	Fußstand	
	VESA 75/100 Befestigungsklammer (Fakultativ)	
Größe	210mm (L) x 40mm (B) x 185mm (H)	
Gewicht	0.8 kg	
Regulierungsbeachtung	CE/FCC	

Portuguese

Processador	iDEQ-T1 IN2940T1: Intel® Celeron® Processor N2940 (2M Cache, up to 2.25 GHz) iDEQ-T1 IJ1800T1: Intel® Celeron® Processor J1800 (1M Cache, up to 2.58 GHz)	
Gráficos	Motor gráfico Intel® da série HD Graphics integrado	
Memória	Suporta Canal Duplo DDR3L 1333 (1.35V/1.5V) Ranhura de Memória 2x DDR3L SO-DIMM, Max. Suporta até 16 GB de memória Cada DIMM suporta módulo não-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L * Por favor, refira a www.biostar.com.tw para a lista de suporte de memória.	
Rede	LAN (RTL8111G)	1x Gigabit Ethernet, Porta RJ-45
	WLAN (Módulo Wi-Fi vendido separadamente)	1x Mini Conector PCIe
Áudio	Realtek Codec ALC662, Suporta 2x Portas com Line out / MIC in	
Armazenamento	1x conector SATA II, transferência de dados até 3.0Gb/s	
I/O Traseiro	Porta DC (19V DC-in)	1x
	Porta USB 3.0	1x
	Porta USB 2.0	1x
	Porta RJ-45 Gigabit Lan	1x
	Conector HDMI	1x
	Conector VGA	1x
	Line-Out	1x
	Mic-In	1x
I/O Frontal	Porta USB 2.0	2x
	Botão de Power on (Ligar)	1x
Ambiente	Temperatura de Funcionamento	0°C ~ 40°C (32°F ~ 100°F)
	Temperatura de Armazenamento	-20°C ~ 60°C (-4°F ~ 140°F)
	Humidade Relativa	20% ~ 80% não condensante
Fonte de Alimentação	19V/45W	
Assistência de SO	Windows 7 / 8 / 8.1 A Biostar reserva-se ao direito de adicionar ou retirar a assistência para qualquer SO, com ou sem aviso prévio.	
Montagem	Pés de apoio	
	Suporte de montagem VESA 75/100 (Opcional)	
Dimensões	210mm (C) x 40mm (L) x 185mm (A)	
Peso	0.8 kg	
Conformidade Regulamentar	CE/FCC	

Russian

Процессор	iDEQ-T1 IN2940T1: Intel® Celeron® Processor N2940 (2M Cache, up to 2.25 GHz) iDEQ-T1 IJ1800T1: Intel® Celeron® Processor J1800 (1M Cache, up to 2.58 GHz)	
Графики	Интегрированные Intel® HD графики серии графического процессора	
Память	Поддерживает Двойной канал DDR3L 1333 (1.35V/1.5V) 2xDDR3L SO-DIMM Слот памяти, макс. поддерживает до 16Гб памяти Каждый DIMM (модуль памяти с двухрядным расположением выводов) поддерживает не-ECC 512Мб/ 1/ 2/ 4/ 8 Гб DDR3L модуля * Для перечня поддержания памяти смотрите www.biostar.com.tw .	
Вычислительная сеть	LAN (RTL8111G)	1xГигабит Ethernet, RJ-45 порт
	WLAN (Wi-Fi модуль продается отдельно)	1x Мини PCIe соединитель
Аудио	Realtek Codec ALC662, поддерживает 2 x порта с Line out (Выход Линии) / MIC in (вход Микрофона)	
Запоминающее устройство	1x SATA II соединитель, скорость передачи данных до 3.0Гб/сек.	
Задние Вход/Выход I/O	Гнездо постоянного тока DC (19V DC-in вход)	1x
	USB 3.0 порт	1x
	USB 2.0 порт	1x
	RJ-45 Гигабит Lan порт	1x
	HDMI соединитель	1x
	VGA соединитель	1x
	Line-Out (Выход линии)	1x
	Mic-In (Вход микрофона)	1x
Передние Вход/Выход I/O	USB 2.0 порт	2x
	Кнопка включения	1x
Условия работы	Рабочая температура	0°C ~ 40°C (32°F ~ 100°F)
	Температура хранения	-20°C ~ 60°C (-4°F ~ 140°F)
	Относительная влажность	20% ~ 80% неконденсирующаяся
Электропитание	19V/45W	
OS Поддержка	Windows 7 / 8 / 8.1 Biostar оставляет за собой право добавлять или удалять поддержку любой ОС с или без предварительного уведомления.	
Установка	Подставка для ног	
	VESA 75/100 Кронштейн (по выбору)	
Размеры	210мм (Д) x 40мм (Ш) x 185мм (В)	
Вес	0.8 кг	
Соблюдение нормативных требований	CE/FCC	

Japanese

プロセッサ	iDEQ-T1 IN2940T1: Intel® Celeron® Processor N2940 (2M Cache, up to 2.25 GHz) iDEQ-T1 IJ1800T1: Intel® Celeron® Processor J1800 (1M Cache, up to 2.58 GHz)	
グラフィックス	Integrated Intel® HD グラフィックス シリーズ グラフィック エンジン	
メモリ	デュアル チャンネル DDR3L 1333 (1.35V/1.5V) 対応 2x DDR3L SO-DIMM メモリ スロットは、メモリ最大16 GBまで対応 各 DIMM はnon-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L モジュール対応 * www.biostar.com.tw にリンクし、メモリ対応リストを取得してください。	
ネットワーク	LAN (RTL8111G)	1x ギガバイト イーサネット、RJ-45 ポート
	WLAN (Wi-Fi モジュール別売)	1x Mini PCIe コネクタ
オーディオ	Realtek Codec ALC662、 2x ポート ラインアウト/マイク入力対応	
保存	1x SATA II コネクタ、データ転送速度は最大 3.0Gb/s まで対応	
リア I/O	DC ジャック (19V DC-in)	1x
	USB 3.0 ポート	1x
	USB 2.0 ポート	1x
	RJ-45 ギガバイト Lan ポート	1x
	HDMI コネクタ	1x
	VGA コネクタ	1x
	ラインアウト	1x
	マイク入力	1x
フロント I/O	USB 2.0 ポート	2x
	パワーオン・ボタン	1x
環境	操作 温度	0°C ~ 40°C (32°F ~ 100°F)
	保存 温度	-20°C ~ 60°C (-4°F ~ 140°F)
	相対 湿度	20% ~ 80%非結露
電源装置	19V/45W	
OS 対応	Windows 7 / 8 / 8.1 Biostar は事前の予告無しに全ての OS に対する追加または削除する権利を留保しま す	
据え付け	蹄摺台	
	VESA 75/100 マウントブラケット(オプション)	
寸法	210mm (L) x 40mm (W) x 185mm (H)	
重量	0.8 kg	
規制対応	CE/FCC	

Spanish

Procesador	iDEQ-T1 IN2940T1: Intel® Celeron® Processor N2940 (2M Cache, up to 2.25 GHz) iDEQ-T1 IJ1800T1: Intel® Celeron® Processor J1800 (1M Cache, up to 2.58 GHz)	
Gráfico	Serie de Intel® HD Gráfico motor gráfico integrado	
Memoria	Sportar Canal Dual DDR3L 1333 (1.35V/1.5V) Muesca de Memoria 2x DDR3L SO-DIMM, Soportar Memoria Max. de 16 GB Cada DIMM soporta modulo non-ECC 512MB/ 1/ 2/ 4/ 8 GB DDR3L Por favor refiere la www.biostar.com.tw para la lista de soporte de Memoria.	
Interconexión	LAN (RTL8111G)	1x Gigabit Ethernet, Puerto RJ-45
	WLAN (se vende por separado el modulo de Wi-Fi)	1x Mini PCIe Conector
Audio	Realtek Codec ALC662, Soportar 2x Puerto con Línea out / MIC in	
Almacenaje	1x SATA II conector, tarifa de transferir datos hasta 3.0Gb/s	
I/O Trasero	DC gato (19V DC-in)	1x
	Puerto de USB 3.0	1x
	Puerto de USB 2.0	1x
	RJ-45 Gigabit Lan puerto	1x
	HDMI conector	1x
	VGA conector	1x
	Línea-Out	1x
	Mic-In	1x
I/O Delantero	Puerto de USB 2.0	2x
	Botón de Potencia On	1x
Ambiente	Temperatura de Operación	0°C ~ 40°C (32°F ~ 100°F)
	Temperatura de Almacenaje	-20°C ~ 60°C (-4°F ~ 140°F)
	Humedad Relativa	20% ~ 80% no-condensación
Suministro de Potencia	19V/45W	
Soportar OS	Windows 7 / 8 / 8.1 Biostar reserva el derecho de añadir o quitar el soporte a cualquier OS con o sin aviso.	
Montaje	Soporte de pie	
	VESA 75/100 Anaquel de Montaje (Opcional)	
Dimensión	210mm (L) x 40mm (W) x 185mm (H)	
Peso	0.8 kg	
Cumplimiento de Regulador	CE/FCC	

2014/08/25